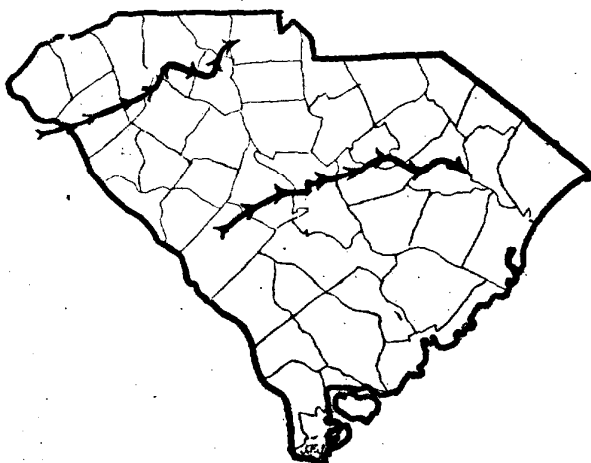


RECORD BREAKING TORNADES IN SOUTH CAROLINA ON APRIL 30, 1924.

Two of the most violent and destructive tornadoes in the history of South Carolina occurred in this Section on April 30, 1924. These rotary storms were part of numerous violent local disturbances prevalent in many sections of the cotton states, incident to a cyclone of unusual intensity that was centered between Louisville, Ky., and Evansville, Ind., on the morning of that date, with the barometer reading 29.38 inches.

In the weather lore of this State they will be known as the Anderson Tornado and the Horrell Hill Tornado because of the preponderance of casualties and devastation at these places. The general paths are shown in the accompanying chart. According to the Greenville *Piedmont*, the nearest approach to these storms in destructiveness was what is known as the Townville Tornado of some 40 years ago in northwestern Anderson County, when a considerable number of persons were killed and injured. Another severe tornado occurred in the Horse Creek Valley of Aiken County on March 7, 1922, causing the death of five persons, injury to 20, and property damage estimated at \$45,000. The paths of the Anderson and Horrell tornadoes are shown in the accompanying chart.



THE ANDERSON TORNADO.

The Anderson tornado came into this State from northern Georgia, crossing the Savannah River into Anderson County about 7:30 a. m. It first became generally destructive at a point some two miles southwest of the city of Anderson, in Anderson County, just before 8:00 a. m., and thence traversed sections of Anderson, Greenville, Laurens, Spartanburg, Union, Cherokee, and York Counties in a sort of zigzag path to the vicinity of Hickory Grove, in western York County, where it was last observed about 11:00 a. m. The length of the path in South Carolina was about 100 miles. The width of the path ranged from 100 to 1,300 yards, the latter width being near Glenn Springs, in Spartanburg County. The hail accompanying the storm was generally light and scattered.

On account of the rather rugged topography, the funnel cloud bounded along, lowering and raising in many sections, meanwhile maintaining its identity, according to many reports received from both sides of its path, and there was unmistakable evidence of rotary winds of great violence.

Mr. Frank T. Cole, Meteorologist, in charge of the Weather Bureau Aerological Station at Due West, S. C., visited the city of Anderson during the afternoon after the storm, and again on May 2. Following is a portion of his report:

"The disturbance was purely tornadic in character, and the small loss of life can only be explained by the flimsy construction of the cottages in the mill village and in the

negro quarters. Over half the lives lost were lost in the better constructed homes in the residence section in the vicinity of East River Street. Due to the width of the tornado, it is also possible that it was not so violent as x x farther east in the State.

"The tornado first (became destructive) two miles southwest of Anderson, at a place called Masters Store, where it destroyed a store and four or five smaller buildings in the vicinity. It then jumped the two miles between Masters Store and Anderson, striking the town just east of McDuffie Street at 8:00 a. m., thence moving in a general direction toward the northeast and slowly widening its path and also increasing its intensity. It jumped the slight depression between the city proper and the mill village, doing little damage, but totally wrecked the mill village as it moved toward the two cotton mills, the Toxaway and the Riverside. Beyond the mills is another depression running across the path of the tornado, and little damage was done there. The last traces of destruction are visible about three-quarters of a mile beyond the Toxaway mill, where a grove of trees was almost totally destroyed and the house in the grove badly damaged, though not thrown down or unroofed. To the south of the mills a depression runs parallel with the course of the tornado, but with no buildings in it. Trees in this place were thrown and twisted in all directions.

"All the deaths, except one, occurred near what was the center of the disturbance, but the greatest property damage took place at the mills."

Mr. William H. Shearer, City Engineer of Anderson, has very kindly made the following statement regarding the storm in the southeastern part of the city and its environs:

"The real center of destruction in the city of Anderson begins about 300 feet east of South McDuffie Street, and, in width, beginning about 100 feet north of East Franklin Street and extending south about 400 or 500 feet. x x Almost directly south of the beginning point, at a place called South Anderson, in distance about three miles, several houses were completely destroyed. Between the towns of Iva and Starr, about 12 miles south, was another storm which blew down a number of houses. At Pendleton, about 14 miles northwest of Anderson, was another storm, blowing down a number of houses."

In its movement toward the northeast, the tornado increased in intensity again near Moore and Walnut Grove, about 13 miles south of Spartanburg, where many persons were injured and much property destroyed. Nine persons were killed in Anderson, and available reports indicate that about 100 were injured and about 600 rendered homeless during the progress of the storm. The general losses are estimated at about \$2,000,000, of which about \$1,500,000 are represented in Anderson County.

THE HORRELL HILL TORNADO.

What is now called the Horrell Hill Tornado first made its appearance about 11:00 a. m. in Aiken County, about 11 miles northeast of the city of Aiken, S. C., and traveled in a serpentine path through the central counties of Lexington, Richland, Sumter, Lee, Darlington, and Florence Counties, and was last observed about 3:00 p. m. near Pamlico, in eastern Florence County, having traveled a distance of about 135 miles.

RECORD BREAKING HAILSTORM AT COLUMBIA.

As the storm approached Columbia about 11:30 a. m. from the southwest, the clouds had a most ominous aspect, very dark and low-hanging, with high thunderheads of great magnitude, the undersheeting having a dull green cast. Artificial light was necessary about high noon. When the windsquall broke over

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the city, it was attended by the most destructive hailstorm of record for the station, the largest hailstones measuring 1 3/4 x 2.0 inches in diameter and 1.0 inch thick, each with an ice core only. The heaviest hail fell between 11:35 and 11:38 a. m., and hailstones were visible in the grass on the grounds until 1:30 p. m.

As subsequently learned, the northern end of the storm cloud was charged with hail, and in the southern end was the tornado, which crossed the Congaree River from Lexington County at Adams Pond, about 9 miles south of Columbia. The center of general hail damage was apparently in Columbia and vicinity, and numerous reports from points on both sides of the tornado's path indicate but a small amount of light hail. Thousands of glass panes in residences, cotton mills, greenhouses, and other buildings were destroyed by the pelting hail and the high winds, and 15 panes of glass in the Weather Bureau observatory were ruined. Many roofs became leaky incident to the driving winds, rains and hail, and much property was damaged by water. The total losses are estimated at about \$60,000. This was by far the most destructive hailstorm of record in this vicinity.

On May 5, the writer, accompanied by two assistants, made a general survey of the region in Richland County traversed by the tornado, beginning at Adams Pond, where the storm first entered the county, and followed the path in cross section, as near as the roads would permit, to a point near the Wateree River, where the storm crossed into Sumter County, between Hagood and Horatio. Later the writer visited the storm region in Lexington County from New Brookland to beyond Edmund.

The uprooted trees, lying at right angles to the path, the tangled debris in the forests, and the demolished residences and farm buildings gave ample evidence of violent circular winds. One large gum tree, in particular, in the Adams Pond swamp forest, had been whirled around, just as one would roll or twist a sheet of soft paper between the hands, and had fallen toward the center of the path, the tough fibers disclosing a twist against the hands of a watch.

A singular feature of this storm was the fact that it remained in contact with the ground during practically the entire journey from northern Aiken County to southern Lee County, where the country became more rolling, and it apparently began to bound as did the Anderson tornado. Numbers of persons were interviewed, and all stated that a well-defined funnel cloud of great proportions was discernible in the rainstorm, and it was of a blue-black color and seemed to drag out behind the main storm cloud aloft. The path ranged from 100 to 1,400 yards in width, the latter width being in the Adams Pond section. At Lykesland, some miles to the northeast, the path was reduced to about 1,000 yards in width, and there was every evidence that the disturbance switched about like a running serpent and swayed back and forth like the swinging of an elephant's trunk.

The strongest wind force seemed to have been developed on the gentle slope a few miles southwest of Horrell Hill, 13 miles east of Columbia, where the path had drawn in to about 500 yards and where the tornado made a sharp turn toward the southeast; it then made another sharp turn toward the north, and a third sharp turn toward the east just south of Horrell Hill, where a school house filled with children was destroyed. It was in this region that the greatest loss of life occurred, and here, while many large trees were uprooted, one large oak about four feet in diameter, with a root system too strong to be torn from the ground, was torn off about midway of the trunk. After passing Horrell Hill, the storm drew down to a path about 300 yards wide and continued eastward south of the Eastover Highway about two miles, then crossed the road and moved in a northeasterly direction toward the Wateree River.

On crossing the Wateree River, the tornado increased in violence, and nearly as many persons were killed in Sumter County near Gaillard's Crossroads and in Florence County south of Timmonsville as in central Richland County. The storm apparently began bounding along in the rather rough country after it reached southern Lee County and was last observed in the vicinity of Pamlico, in eastern Florence County, where the path was reduced to about 100 yards.

It seems unnecessary to go into the gruesome details of distress, suffering and misery incident to these two storms save to remark that the public responded generously to the crying needs of the victims, in personal care, monetary assistance, and material help in constructing places of shelter and habitation and replanting crops destroyed. Many planters suffered complete loss of their homes, which were simply blown away and distributed throughout the country side. During the progress of this tornado, 67 persons lost their lives, and the property loss was estimated at \$1,000,000.

According to the latest statements of the Director of the Red Cross, operating in this and the Anderson fields, together with generous responses to inquiries sent out by this office, following is a statement of the deaths, injured, and homeless, by counties, incident to these two storms:

| County. | Number of deaths. | Number of persons injured. |
|-----------------|-------------------|----------------------------|
| Lexington | 8 | 84 |
| Richland | 24 | 244 |
| Sumter | 20 | 198 |
| Lee | 1 | 8 |
| Florence | 14 | 144 |
| Anderson | 9 | 100 |
| Total | 76 | 778 |

The first column represents published reports of death. The values by counties in the next column are proportional. There were 465 homes destroyed, 2,532 persons rendered temporarily homeless, and 710 families affected. Later data will not materially change the general totals.

R. H. S.